

2016 Children's Safe Products - Reporting Rule update
Draft Chemical Evaluation

CAS 7439-98-7

Substance Name Molybdenum and molybdenum compounds (Mo)

Historical summary

In 2011, toxicity of Molybdenum (Mo) was based on a REPROTEXT grade of B for reproductive toxicity [1,2]. *REPROTEXT® Reproductive Hazard Reference*: presents in-depth reviews on the full-range of health effects of industrial chemicals commonly encountered in the workplace. Potential for exposure to Mo is based on data from children's products and human biomonitoring [1].

The International Molybdenum Association (IMOA) provided additional information regarding analysis of Mo toxicity and asserted that Mo is an essential trace nutrient that should be removed from the list of chemicals of high concern to children (CHCC) [5].

Toxicity

Mo has a REPROTEXT grade of B for reproductive toxicity [2]. Since 2011 we have reconsidered REPROTEXT and determined it is no longer identified as an authoritative source for CSPA. During this review, we also found the REPROTEXT database and scores have not been updated. The information in REPROTEXT is informative, but not sufficient by itself for the purposes of CSPA CHCC listing. We were not able to identify Mo toxicity from another authoritative source.

REPROTEXT is a subscription-based database, and the University of Washington no longer subscribes to it, which further limits access for residents of Washington.

Exposure

Mo is an essential trace nutrient in humans. Biomonitoring in the general U.S. population by the Centers for Disease Control and Prevention (CDC) show that urinary levels in the general population dropped slightly from 1999 to 2004 [3]. Molybdenum was found in testing of children's school supplies by the Danish Ministry of the Environment [4].

References

1. Ecology, 2011, Phase I of process used to generate the CSPA reporting list. Available at the bottom of: <http://www.ecy.wa.gov/programs/hwtr/rtt/cspa/chcc.html>
2. REPROTEXT, "Molybdenum" in REPROTEXT Database Version 5.1 Greenwood Village, CO: Thomson Reuters (Healthcare) Inc. (accessed 2009).
3. Centers for Disease Control and Prevention (CDC), Fourth National Report on Human Exposure to Environmental Chemicals, December 2009. <https://www.cdc.gov/exposurereport/pdf/fourthreport.pdf>
4. Danish Ministry of the Environment, Environmental Protection Agency. Surveys on Chemicals in consumer products. Report 84. <http://eng.mst.dk/topics/chemicals/consumers--consumer-products/danish-surveys-on-consumer-products/>
5. International Molybdenum Association (IMOA). Molybdenum and compounds – Request to consider removal from the CPSR CHCC list. September 9, 2016.